

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
and ENHANCED NEW SOURCE REVIEW  
OFFICE OF AIR MANAGEMENT**

**Lippert Components-Indiana Frame Division  
16700 Skyview Drive  
Goshen, Indiana 46526**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F039-5477-00309	
Original issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 11, 1996

First Minor Permit Modification: SMF039-9351, issued April 30, 1998  
First Significant Permit Revision: 039-10691, issued June 15, 1999

Second Significant Permit Revision: 039-12123	Pages Affected: 3, 4, 4a, 19, 20, 20a, 20d, 20e, 20f Section Added: D.4
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

### A.1 General Information

The Permittee owns and operates a mobile home metal frame manufacturing source.

Responsible Official: Edward Vasicek  
Source Address: 16700 Skyview Drive, Goshen, Indiana 46526  
Mailing Address: 16700 Skyview Drive, Goshen, Indiana 46526  
Phone Number: 517-463-8341  
SIC Code: 3440  
County Location: Elkhart  
County Status: Maintenance for Ozone  
Attainment for all other criteria pollutants  
Source Status: Synthetic Minor Source, FESOP Program

### A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

#### **Skyview Drive Plant**

- (a) two (2) air assisted airless spray guns, located in two (2) booths identified as E-1 and E-2, and each equipped with dry filters for overspray control;
- (b) two (2) air-assisted airless spray guns to be located in the existing permitted mobile home surface coating lines identified as E-1 and E-2, with a maximum capacity of coating 160.0 linear feet of metal mobile home frames per hour, and exhausted through two (2) existing stacks (S/V ID E1 and E2), respectively;
- (c) one (1) air-assisted airless surface coating line, identified as E-3, with a maximum capacity of coating 166.01 linear feet of metal RV frames per hour, utilizing dry filters for particulate control, and exhausted through one (1) stack (S/V ID E3);
- (d) four (4) air assisted airless spray guns for an increase in production in the RV frame production line, identified as E-3, equipped with dry filters for air pollution control, with a capacity increase of 271.5 linear feet per hour, exhausted through one (1) stack (S/V ID E3), and
- (e) two (2) paint bays for the production of mobile home frames, identified as E-4, with five (5) airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

#### **Sourwood Drive Plant**

- (f) One (1) shot blasting operation, known as EU-3b, with emissions controlled by a baghouse dust collector with a flow rate of 800 acfm. Capacity: 6,929 pounds of steel per hour.

### A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

### **Skyview Drive Plant**

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.
- (b) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (c) Paved and unpaved roads and parking lots with public access.
- (d) Welding activities emitting less than five (5) pounds per day or one (1) ton per year of a single HAP.
- (e) Welding operations with PM<sub>10</sub> emission less than twenty-five (25) pounds per day.

### **Sourwood Drive Plant**

- (f) One (1) powder coating operation consisting of a powder coating booth with zero emissions of volatile organic compounds or hazardous air pollutants, and a natural gas-fired baking oven with combustion of less than ten million (10,000,000) Btu per hour.
- (g) Forty-five (45) MIG welding stations emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.
- (h) Fourteen (14) natural gas-fired tube heaters with combustion of less than ten million (10,000,000) Btu per hour.

#### **A.4 FESOP Applicability [326 IAC 2-8-2]**

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

- (a) The Permittee shall also provide additional information as requested by IDEM, OAM, to determine the compliance status of the source in accordance with 326 IAC 2-8-5(a).
- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that the IDEM, OAM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon written request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. For information claimed to be confidential, the Permittee shall furnish such records directly to both the U.S. EPA and IDEM, OAM, along with a claim of confidentiality.

Such confidentiality claims shall meet the requirements of 40 CFR Part 2, Subpart B (when submitting to U.S. EPA) and 326 IAC 17 (when submitting to IDEM, OAM).

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### **Skyview Drive Plant**

- (a) two (2) air assisted airless spray guns, located in two (2) booths identified as E-1 and E-2, and each equipped with dry filters for overspray control;
- (b) two (2) air-assisted airless spray guns to be located on the existing permitted mobile home surface coating lines (E-1 and E-2), with a maximum capacity of coating 160.0 linear feet of metal mobile home frames per hour, and exhausted through two (2) existing stacks (S/V ID E1 and E2), respectively;
- (c) one (1) air-assisted airless surface coating line, identified as E-3, with a maximum capacity of coating 166.01 linear feet of metal RV frames per hour, utilizing dry filters for particulate control, and exhausted through one (1) stack (S/V ID E3);
- (d) four (4) air assisted airless spray guns for an increase in production in the RV frame production line, identified as E-3, equipped with dry filters for air pollution control, with a capacity increase of 271.5 linear feet per hour, exhausted through one (1) stack (S/V ID E3), and
- (e) two (2) paint bays for the production of mobile home frames, identified as E-4, with five (5) airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### **Emissions Limitations [326 IAC 2-8-4(1)]**

#### **D.1.1 Volatile Organic Compounds [326 IAC 8-2-9]**

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating applied to the mobile home and RV metal frames shall be limited to 3.5 pounds of VOC per gallon of coating less water, for air dried coatings or forced warm air dried coatings at temperatures up to 194°F Fahrenheit;

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

#### **D.1.2 Volatile Organic Compounds**

The VOC usage at the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), shall be limited to a total of 99.0 tons per any twelve (12) consecutive months. This requirement satisfies the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-8 (FESOP), and shall render the requirements under 326 IAC 2-7 (Part 70 Program) not applicable.

#### **D.1.3 Fine Particulate Matter (PM<sub>10</sub>)**

The PM<sub>10</sub> emissions from the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), shall not exceed 11.5 pounds per hour. Therefore, the requirements of 326 IAC 2-7 (Part 70) do not apply.

**D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]**

The PM from the four (4) surface coating lines, (E-1, E-2, E-3 and E-4) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

**D.1.5 Hazardous Air Pollutants (HAPs)**

The HAPs content delivered to the applicators of the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), including coatings, dilution solvents and cleanup solvents, shall be limited as follows:

- a) The amount of any single hazardous air pollutant shall be less than 10 tons per twelve (12) consecutive month rolling period.
- b) The amount of any combination of HAPs shall be less than 25 tons per twelve (12) consecutive month rolling period.

**Compliance Determination Requirements**

**D.1.6 Volatile Organic Compounds (VOC)**

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

**Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]**

**D.1.7 Particulate Matter Overspray**

The dry filters for particulate matter overspray control shall be in operation at all times when the four (4) surface coating lines, (E-1, E-2, E-3 and E-4) are in operation.

**D.1.8 Preventive Maintenance [326 IAC 2-8-4(9)]**

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for each facility and its control device.

**D.1.9 Monitoring**

Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To document compliance with Conditions D.1.3 and D.1.4, observations shall be made weekly of the overspray while at least one of the booths is in operation.

Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed.

Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

## **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

### **D.1.10 Record Keeping Requirements**

- (a) To document compliance with the Conditions D.1.1, D.1.2 and D.1.5, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.2, and the HAPs emission limits established in D.1.5.
- (1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the month of use;
  - (3) The volume weighted VOC content of each coating used for each month;
  - (4) The cleanup solvent usage for each month;
  - (5) The total VOC and HAP usage for each month; and
  - (6) The weight of VOCs and HAPs emitted for each compliance period.
- (b) To document compliance with Condition D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventative Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.11 Reporting Requirements**

A quarterly summary of the information to document compliance with Conditions D.1.2 and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.



## SECTION D.3

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)] Insignificant Activities

#### Skyview Drive Plant

- (a) Welding activities emitting less than five (5) pounds per day or one (1) ton per year of a single HAP.
- (b) Welding operations with PM<sub>10</sub> emission less than twenty-five (25) pounds per day:

#### Sourwood Drive Plant

- (c) One (1) powder coating operation consisting of a powder coating booth with zero emissions of volatile organic compounds or hazardous air pollutants, and a natural gas-fired baking oven with combustion of less than ten million (10,000,000) Btu per hour.
- (d) Forty-five (45) MIG welding stations emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each facility shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate of one hundred (100) pounds per hour up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

### Compliance Determination Requirement

#### D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

#### D.3.3 Particulate Matter

The particulate matter control device is considered an integral part of the powder coating operation. In order to ensure that this process remains an insignificant activity:

- (a) The dry filters particulate control device shall be in operation at all times that the powder coating process is in operation.
- (b) The doors to the powder coating booth shall remain closed at all times when the powder coating process is in operation.

## SECTION D.4

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

#### Sourwood Drive Plant

- (f) One (1) shot blasting operation, known as EU-3b, with emissions controlled by a baghouse dust collector with a flow rate of 800 acfm. Capacity: 6,929 pounds of steel per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shot blasting operation shall not exceed 9.43 pounds per hour when operating at a process weight rate of 6,929 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.4.2 Fine Particulate Matter (PM<sub>10</sub>)

The PM<sub>10</sub> emissions from the shot blasting operation shall not exceed 6.60 pounds per hour. Therefore, the requirements of 326 IAC 2-7 (Part 70) do not apply.

### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### D.4.3 Particulate Matter (PM)

The baghouse dust collector for PM control shall be in operation and control emissions from the shot blasting operation facilities at all times that the facility is in operation.

#### D.4.4 Visible Emissions Notations

- (a) Daily visible emission notations of the baghouse dust collector stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### **D.4.5 Baghouse Inspections**

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An inspection shall be performed each calendar quarter of all bags controlling the shotblasting operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

#### **D.4.6 Broken or Failed Bag Detection**

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In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

### **Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

#### **D.4.7 Record Keeping Requirements**

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- (a) To document compliance with Condition D.4.4, the Permittee shall maintain records of daily visible emission notations of the shotblast baghouse dust collector stack exhaust.
- (b) To document compliance with Condition D.4.5, the Permittee shall maintain records of the results of the inspections required under Condition D.4.5 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit**

#### **Source Background and Description**

<b>Source Name:</b>	<b>Lippert Components - Indiana Frame Division</b>
<b>Source Location:</b>	<b>16700 Skyview Drive, Goshen, Indiana 46526</b>
<b>County:</b>	<b>Elkhart</b>
<b>SIC Code:</b>	<b>3440</b>
<b>Operation Permit No.:</b>	<b>F 039-5477-00309</b>
<b>Operation Permit Issuance Date:</b>	<b>December 11, 1996</b>
<b>Significant Permit Revision No.:</b>	<b>SPR 039-12123-00309</b>
<b>Permit Reviewer:</b>	<b>Patrick Brennan/MES</b>

The Office of Air Management (OAM) has reviewed a revision application from Lippert Components, Inc. relating to the construction and operation of the following emission units and pollution control devices:

#### **Significant Emission Units**

##### **Sourwood Drive Plant**

- (a) One (1) shot blasting operation, known as EU-3b, with emissions controlled by a baghouse dust collector with a flow rate of 800 acfm. Capacity: 6,929 pounds of steel per hour.

#### **Insignificant Activities**

- (a) One (1) powder coating operation consisting of a powder coating booth with zero emissions of volatile organic compounds or hazardous air pollutants, and a natural gas-fired baking oven with combustion of less than ten million (10,000,000) Btu per hour.
- (b) Forty-five (45) MIG welding stations emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.
- (c) Fourteen (14) natural gas-fired tube heaters with combustion of less than ten million (10,000,000) Btu per hour.

#### **History**

On April 3, 2000, Lippert Components, Inc., submitted an application to the OAM requesting to add additional equipment and capacity at their mobile home metal frame manufacturing source. This application include the shot blasting operation, as well as an electrostatic powder coating operation and additional welding capacity. The source was issued a Federally Enforceable State Operating

Permit (FESOP) on December 11, 1996, and this permit has undergone previous revisions on April 30, 1998 and June 15, 1999. In addition, the source submitted a request to IDEM on November 15, 1999, requesting a change in monitoring conditions in the FESOP. That request has also been incorporated into this significant permit revision.

### **Source Definition**

This mobile home metal frame manufacturing source consists of two (2) plants:

- (a) Plant 1 is located at 16700 Skyview Drive, Elkhart, Indiana; and
- (b) Plant 2 is located at 65781 Sourwood Drive, Elkhart, Indiana.

Since the two (2) plants are located on contiguous properties, have the same SIC codes and are owned by one (1) company, they will be considered one (1) source. The original FESOP permit, which is being revised here, uses 16700 Skyview Drive as the legal address of the source. The new location being permitted in this revision will be known as the Sourwood Drive Plant

### **Air Pollution Control Justification as an Integral Part of the Process**

The company has submitted the following justification such that the dry filter particulate control device for the powder coating operation, should be considered as an integral part of the electrostatic coating process:

- (a) The powder coating booth is completely self contained, with no external exhaust.
- (b) The primary purpose of the control device is to capture powder for reuse.
- (c) A failure of the device will render the powder coating booth unusable until repairs are made, but will not result in any discharge of particulate matter to the environment.

IDEM, OAM has evaluated the justifications and agreed that the dry filter particulate control device will be considered as an integral part of the powder coating process. Therefore, the permitting level will be determined using the potential to emit after the dry filter particulate control device, and the process will be considered an insignificant activity. Operating conditions in the proposed permit will specify that the dry filter particulate control device shall operate, and that the booth shall remain closed at all times when the powder coating process is in operation.

### **Enforcement Issue**

There are no enforcement actions pending.

### **Stack Summary**

The new equipment will require no stacks. The shot blasting operation will exhaust inside the building.

### **Recommendation**

The staff recommends to the Commissioner that the FESOP Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 3, 2000. Additional information was received on May 5, 2000.

### Emission Calculations

See page 1 of 1 of Appendix A of this document for detailed emissions calculations from the shot blasting operation.

### Potential To Emit of Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls for this revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	173
PM <sub>10</sub>	121
SO <sub>2</sub>	0.0
VOC	0.0
CO	0.0
NO <sub>x</sub>	0.0

### Justification for Revision

The FESOP is being revised through a FESOP Significant Permit Revision. This revision is being performed pursuant to 326 IAC 2-8-11.1(f)(1) because potential emissions of PM<sub>10</sub> exceed 25 tons per year.

### County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for the remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	42.2
PM <sub>10</sub>	42.2
SO <sub>2</sub>	0.0
VOC	99.0
CO	0.30
NO <sub>x</sub>	2.10
Single HAP	10.0
Total HAPs	25.0

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

- (b) These emissions are based upon the first significant revision to the FESOP permit for the source, F 039-10691-00309.

#### Potential to Emit of Revision After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this FESOP revision.

Process/facility	Potential to Emit (tons/year)							
	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	Single HAP	Combined HAPs
Existing Source	42.2	42.2	0.0	99	0.30	2.10	10	25
Proposed Revision	0.520	0.363	0.0	0.0	0.0	0.0	0.0	0.0
Modified Source Following Revision	42.7	42.6	0.0	99	0.30	2.10	10	25
Revised FESOP Limit	NA	79.1	99	99	99	99	10	25
PSD Threshold Level	250	250	250	250	250	250	NA	NA

- (a) The existing PM<sub>10</sub> limit for the source is 82.8 TPY, which represents 99 TPY minus 16.2 TPY of insignificant activities. The modified source includes an additional 3.70 tons per year of PM<sub>10</sub> emissions from insignificant activities (welding). Therefore, the revised PM<sub>10</sub> FESOP limit is 82.8 TPY -3.70 TPY = 79.1 TPY. This limit has been apportioned as 28.9 tons per year for the shot blasting facility, and 50.2 tons per year for the surface coating booths.
- (b) The potential to emit(as defined in 326 IAC 2-1.1-1(16) of the modified source is below FESOP threshold levels for all regulated pollutants. Therefore, the source continues to satisfy the requirements of 326 IAC 2-8, and 326 IAC 2-7 (Part 70 Permit Program) does not apply to this source.
- (c) This revision to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed revision.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed revision.



### State Rule Applicability - Entire Source

#### 326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the VOC usage at the four surface coating lines, E-1, E-2, E-3 and E-4, shall be limited to a total of 99.0 tons per any twelve (12) consecutive months. PM<sub>10</sub> emissions from the four surface coating lines, E-1, E-2, E-3 and E-4, and the shot blasting operation shall be limited to a total of 99.0 tons per any twelve (12) consecutive months, including emissions from insignificant activities. The emission limits under this FESOP revision continue to satisfy the requirements of 326 IAC 2-8, and 326 IAC 2-7 (Part 70 Permit Program) does not apply to this source. This requirement also satisfies the requirements of 326 IAC 2-2 and 326 IAC 2-3.

#### 326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60)) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### State Rule Applicability - Individual Facilities

#### 326 IAC 6-3 (Process Operations)

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the shot blasting operation shall not exceed the allowable particulate matter (PM) emission rate of 9.43 pounds per hour based on a potential throughput of 6,929 pounds per hour.

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by the use of this equation:

$$E = 4.10P^{0.67} \quad \text{where: } E = \text{rate of emission in pounds per hour,} \\ P = \text{process weight in tons per hour.}$$

$$E = 4.10(3.46 \text{ tons/hr})^{0.67} \\ E = 9.43 \text{ pounds PM per hour;}$$

The potential emissions from the shot blasting operation are equal to 0.119 pounds per hour, and are therefore in compliance with 326 IAC 6-3 (Process Operations).

- (b) That pursuant to 326 IAC 6-3 (Process Operations), the forty-five (45) MIG welding stations shall not exceed the allowable particulate matter (PM) emission rate of 9.43 pounds per hour from all ten (10) stations based on a potential throughput of 6,929 pounds per hour.

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by the use of this equation:

$$E = 4.10P^{0.67} \quad \text{where: } E = \text{rate of emission in pounds per hour,}$$

P = process weight in tons per hour.

$$E = 4.10(3.46 \text{ tons/hr})^{0.67}$$
$$E = 9.43 \text{ pounds PM per hour;}$$

The potential emissions from the forty-five (45) MIG welding stations are equal to 0.845 pounds per hour and are therefore in compliance with 326 IAC 6-3 (Process Operations).

### Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The shot blasting operation has applicable compliance monitoring conditions as specified below:

- (a) Daily visible emission notations of the baghouse stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary because the baghouse for the shot blasting process must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

### Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in bold):

1. The new equipment in the Sourwood Drive Plant has been added to the permit. In addition the equipment at the existing Skyview Drive Plant has been identified as such.

#### A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

##### **Skyview Drive Plant**

- (a) two (2) air assisted airless spray guns, located in two (2) booths identified as E-1 and E-2, and each equipped with dry filters for overspray control;
- (b) two (2) air-assisted airless spray guns to be located in the existing permitted mobile home surface coating lines identified as E-1 and E-2, with a maximum capacity of coating 160.0 linear feet of metal mobile home frames per hour, and exhausted through two (2) existing stacks (S/V ID E1 and E2), respectively;
- (c) one (1) air-assisted airless surface coating line, identified as E-3, with a maximum capacity of coating 166.01 linear feet of metal RV frames per hour, utilizing dry filters for particulate control, and exhausted through one (1) stack (S/V ID E3);
- (d) four (4) air assisted airless spray guns for an increase in production in the RV frame production line, identified as E-3, equipped with dry filters for air pollution control, with a capacity increase of 271.5 linear feet per hour, exhausted through one (1) stack (S/V ID E3), and
- (e) two (2) paint bays for the production of mobile home frames, identified as E-4, with five (5) airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

##### **Sourwood Drive Plant**

- (f) **One (1) shot blasting operation, known as EU-3b, with emissions controlled by a baghouse dust collector with a flow rate of 800 acfm. Capacity: 6,929 pounds of steel per hour.**

#### A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

##### **Skyview Drive Plant**

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

- (b) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (c) Paved and unpaved roads and parking lots with public access.
- (d) Welding activities emitting less than five (5) pounds per day or one (1) ton per year of a single HAP.
- (e) Welding operations with PM<sub>10</sub> emission less than twenty-five (25) pounds per day.

**Sourwood Drive Plant**

- (f) **One (1) powder coating operation consisting of a powder coating booth with zero emissions of criteria or hazardous air pollutants, and a natural gas-fired baking oven with combustion of less than ten million (10,000,000) Btu per hour.**
  - (g) **Forty-five (45) MIG welding stations emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**
  - (h) **Fourteen (14) natural gas-fired tube heaters with combustion of less than ten million (10,000,000) Btu per hour.**
2. The equipment list in Section D.1 has been modified to identify the Skyview Drive Plant.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Skyview Drive Plant

- (a) two (2) air assisted airless spray guns, located in two (2) booths identified as E-1 and E-2, and each equipped with dry filters for overspray control;
- (b) two (2) air-assisted airless spray guns to be located on the existing permitted mobile home surface coating lines (E-1 and E-2), with a maximum capacity of coating 160.0 linear feet of metal mobile home frames per hour, and exhausted through two (2) existing stacks (S/V ID E1 and E2), respectively;
- (c) one (1) air-assisted airless surface coating line, identified as E-3, with a maximum capacity of coating 166.01 linear feet of metal RV frames per hour, utilizing dry filters for particulate control, and exhausted through one (1) stack (S/V ID E3);
- (d) four (4) air assisted airless spray guns for an increase in production in the RV frame production line, identified as E-3, equipped with dry filters for air pollution control, with a capacity increase of 271.5 linear feet per hour, exhausted through one (1) stack (S/V ID E3), and
- (e) two (2) paint bays for the production of mobile home frames, identified as E-4, with five (5) airless spray guns, equipped with dry filters for overspray control, with a capacity of 160 linear feet of metal mobile home frames per hour, exhausted through one (1) stack (S/V ID E4).

**(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)**

- 3. In order to for the source to meet the 99 ton per year FESOP limit with the addition of  $PM_{10}$  emissions from the shotblasting operation, the  $PM_{10}$  limits from the surface coating booths were reduced. The revised condition is as follows:
  - D.1.3 Fine Particulate Matter ( $PM_{10}$ )  
The  $PM_{10}$  emissions from the four (4) surface coating lines, (E-1, E-2, E-3 and E-4), shall not exceed ~~48.9~~ 11.5 pounds per hour. Therefore, the requirements of 326 IAC 2-7 (Part 70) do not apply.
- 4. On November 16, 1999, the applicant requested that condition D.1.10, Daily Visible Emission Notations, be removed from the permit. This condition was in the original FESOP, but OAM no longer requires this condition for surface coating operations. The removed condition is as follows. All subsequent section D.1 conditions have been renumbered accordingly.

~~D.1.10 Daily Visible Emissions Notations~~

~~Daily visible emission notations of the spray booth stack exhaust, shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.~~

5. Condition D.1.11 (b), now D.1.10 (b), was also changed to reflect the removal of Condition D.1.10.

~~D.1.10~~ ~~D.1.14~~ Record Keeping Requirements

- (b) To document compliance with Conditions D.1.9 ~~and D.1.10~~, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventative Maintenance Plan.
6. The welding and powder coating facilities from the Sourwood Drive Plant were added to Section D.3, specifically regulated significant activities. The revised section is as follows:

**SECTION D.3 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)] Insignificant Activities**

**Skyview Drive Plant**

- (a) Welding activities emitting less than five (5) pounds per day or one (1) ton per year of a single HAP.
- (b) Welding operations with PM<sub>10</sub> emission less than twenty-five (25) pounds per day:

**Sourwood Drive Plant**

- (c) **One (1) powder coating operation consisting of a powder coating booth with zero emissions of volatile organic compounds or hazardous air pollutants, and a natural gas-fired baking oven with combustion of less than ten million (10,000,000) Btu per hour.**
- (d) **Forty-five (45) MIG welding stations emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]**

**D.3.3 Particulate Matter**

**The particulate matter control device is considered an integral part of the powder coating operation. In order to ensure that this process remains an insignificant activity:**

- (a) **The dry filters particulate control device shall be in operation at all times that the powder coating process is in operation.**

- (b) The doors to the powder coating booth shall remain closed at all times when the powder coating process is in operation.

7. Section D.4 has been added to the permit for the Sourwood Drive shot blasting operation. The new conditions are as follows:

#### SECTION D.4 FACILITY OPERATION CONDITIONS

##### Facility Description [326 IAC 2-8-4(10)]:

###### Sourwood Drive Plant

- (f) One (1) shot blasting operation, known as EU-3b, with emissions controlled by a baghouse dust collector with a flow rate of 800 acfm. Capacity: 6,929 pounds of steel per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

##### Emission Limitations and Standards [326 IAC 2-8-4(1)]

###### D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shot blasting operation shall not exceed 9.43 pounds per hour when operating at a process weight rate of 6,929 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and

P = process weight rate in tons per hour

###### D.4.2 Fine Particulate Matter (PM<sub>10</sub>)

The PM<sub>10</sub> emissions from the shot blasting operation shall not exceed 6.60 pounds per hour. Therefore, the requirements of 326 IAC 2-7 (Part 70) do not apply.

##### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

###### D.4.3 Particulate Matter (PM)

The baghouse dust collector for PM control shall be in operation and control emissions from the shot blasting operation at all times that the facility is in operation.

#### **D.4.4 Visible Emissions Notations**

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- (a) Daily visible emission notations of the baghouse dust collector stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### **D.4.5 Baghouse Inspections**

---

An inspection shall be performed each calendar quarter of all bags controlling the shotblasting operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

#### **D.4.6 Broken or Failed Bag Detection**

---

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).



**Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

**D.4.7 Record Keeping Requirements**

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- (a) To document compliance with Condition D.4.4, the Permittee shall maintain records of daily visible emission notations of the shotlbast baghouse dust collector stack exhaust.
- (b) To document compliance with Condition D.4.5, the Permittee shall maintain records of the results of the inspections required under Condition D.4.5 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Conclusion**

The construction of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 039-12123-00309.

**Appendix A: Emission Calculations  
Baghouse Operations - Pneumatic Blasting**

Page 1 of 1 TSD App A

**Company Name: Lippert Components, Inc.  
Address City IN Zip: 16700 Skyview Drive, Goshen, Indiana 46526  
SSM 039-12123  
Pit ID: 039-00309  
Reviewer: Pat Brennan/MES  
Date: April, 3, 2000**

Process	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
Shot Blasting, Alum. Oxide, PM	99.7%	0.0173	800.0	39.5	173.20	0.119	0.520
Shot Blasting, Alum. Oxide, PM10	99.7%	0.0121	800.0	27.7	121.14	0.083	0.363
Shot Blasting, Steel Shot, PM	99.7%	0.0103	800.0	23.5	103.12	0.071	0.309
Shot Blasting, Steel Shot, PM10	99.7%	0.0089	800.0	20.3	89.10	0.061	0.267

**Note: Shot Blasting will utilize either aluminum oxide or steel shot, not both simultaneously. Emissions from blasting with aluminum oxide will be used for PTE determination.**

**Methodology**

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

**Allowable Rate of Emissions**

Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	Allowable Emissions (tons/yr)
6929	3.46	9.43	41.3

**Methodology**

Allowable Emissions = 4.10(Process Weight Rate)<sup>0.67</sup>

**Insignificant Activities - Welding**

Welding Emissions = (.0051 lbs PM/PM10 per lb electrode) \* (3.68 lbs electrode/hour/welding station) \* (45 welding stations) \* (8760 hr/year) \*(1 ton/2000 lbs) = 3.70 tons per year PM/PM10